## ABSTRACT

The present invention involves a compact vehicle temperature control system. The system includes a housing, an evaporator core and a heater core disposed in the housing, and a separation wall disposed between the evaporator core and heater core. The housing has an intake opening for air intake and an output opening for output air. The evaporator core is in fluid communication with the intake opening. The heater core is disposed downstream from the evaporator core and in fluid communication with the evaporator core, defining a space between the evaporator core and the heater core. The heater core has a first portion and a second portion. The separation wall has a first end and a second end. The first end is attached to the first portion of the heater core and extends therefrom along the length of the heater core in the space between the evaporator core and the heater core.